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Abstract

Wind power installations generally have an active drive for wind direction tracking. The active drive rotates the machine housing of the wind power installation in such a way that the rotor blades of the rotor are oriented in the direction of the wind. That drive which is required for wind direction tracking purposes is generally an azimuthal drive which is usually disposed with the associated azimuthal mountings between the tower top and the machine housing. One displacement drive is sufficient when small wind power installations are involved, while larger wind power installations are generally equipped with a plurality of azimuthal drives.

The object of the invention is to improve the azimuthal drive for wind power installations so that the above-indicated problems are eliminated, providing a structurally simple azimuthal drive, ensuring uniform load distribution for each azimuthal drive, and preventing unwanted torque fluctuations in the individual drives.

A wind power installation comprising a machine housing which accommodates a rotor with at least one rotor blade and a displacement device for displacement of the machine housing for desired orientation of the rotor in the direction of the wind, wherein the displacement device has as its drive a three-phase asynchronous motor which for displacement of the machine housing is acted upon by a three-phase current and is at times or completely acted upon with direct current during the stoppage time of the machine housing.

(Figure 3)